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Werblin

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[54] MULTI-COMPONENT INTRAOCULAR LENS

[75] Inventor: Theodore P. Werblin, Bluefield, W. Va.

[73] Assignee: Werblin Research & Development Corp., Princeton, W. Va.

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[58] Field of Search 623/6

[56] References Cited

U.S. PATENT DOCUMENTS

3,458,870	8/1969	Stone, Jr.	623/5
3,945,054	3/1976	Fedorov et al.	.....	623/5
4,373,218	2/1983	Schacher	.....	623/6
4,402,579	9/1983	Poler	.....	623/6
4,575,373	3/1986	Johnson	.....	623/6
4,585,456	4/1986	Blackmore	.....	623/6
4,585,457	4/1986	Kalb	.....	623/6
4,685,921	8/1987	Peyman	.....	623/6
4,685,922	8/1987	Peyman	.....	623/6
4,731,078	3/1988	Stoy et al.	.....	623/6
4,778,463	10/1988	Hetland	.....	623/6
4,932,971	6/1990	Kelman	.....	623/6
4,950,289	8/1990	Krasner	.....	623/6

OTHER PUBLICATIONS

Werblin et al. "Epikeratophakia: The surgical correc-

tion of aphakia. III. Preliminary results of a prospective clinical trial," 93 Arch. Ophth., pp. 342-347 (1982).

Werblin et al. "Hydrogel Keratophakia: Measurement of Intraocular Pressure," vol. 11, No. 4 CLAO Journal, pp. 354-357 (Oct. 1985).

Werblin et al. "Refractive Corneal Surgery: The Use of Implantable Alloplastic Lens Material," 11 Austral Journal of Ophthalmology, pp. 325-331 (1983).

Werblin "Lamellar Refractive Surgery: Where Have We Been And Where Are We Going?" vol. 5, No. 3, Refractive and Corneal Surgery, pp. 167-176 (Jan. 1989).

Binder et al. "Hydrogel Refractive Keratoplasty. Lens Removal and Exchanges" vol. 2, Cornea at pp. 119-125.

Primary Examiner—Randy C. Shay

Attorney, Agent, or Firm—Arent, Fox, Kintner, Plotkin & Kahn

[57] ABSTRACT

The multi-component intraocular lens for an eye includes a base intraocular lens, a cap situated on the base lens, a plurality of flanges for attaching the cap on the base lens, at least one sandwiched lens which is sandwiched between the base intraocular lens and the cap, and a plurality of projections holding the multi-component intraocular lens in place in the eye, wherein the base intraocular lens forms a platform on which to place the other components and the cap forms an enclosure holding the sandwiched lens in a desired position.

26 Claims, 6 Drawing Sheets

